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Correspondence from practical farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may wish.

The PLOUGHMAN offers great advantages to advertisers. Its circulation is large and among the most active and intelligent portion of the community. Entered as second-class mail matter.

Italian Farm Work and Wages.
Every inch of Italy is farmed, as you may well suppose, to support thirty million of people. You may take every man, woman and child there is in the United States today—sixty million—add fifteen million to them, and drop them right down in the single State of Texas, and it would not be as thickly populated as Italy is today. So they farm every inch of land, away to the tops of the mountains, where there is a bit of soil.

I have seen twenty women in one field. They employ from six to eight persons on an acre of land where we do not employ more than one. What are their wages? From fifteen to eighteen cents a day, working the living day in the hot sun. I was through there in haying time, and the women did the haying; they did it with a scythe like our own bushwhacker, as we call it, only about three inches wider than that—Hon. William F. Frye.

Enemies of the Moths.
While Dr. L. O. Howard, head of the National Bureau of Entomology, and Prof. A. H. Kirkland, State superintendent of the work against the gypsy and the brown-tail moth, now hold high hopes that by means of the imported parasites the moths may be finally kept in subjection to an extent which will make them no more of a real pest here than in their native homes abroad, neither of these experts is idle while awaiting the time for the parasites to multiply sufficiently to bring about the hoped-for results.

But to say that they are encouraged by results in the parasite propagation work so far, is putting it mildly indeed. When Dr. Howard was here last week his visit to the laboratory at North Saugus brought out the fact that already we have an American-born generation of two species of the European parasites, namely the pteromalus and the braconid flies.

Last Wednesday came the joyful news that the pteromalus, which had frequently been observed parasitizing the moth caterpillars in the enclosed cages used for experimental work, had been seen doing this useful work in the open country.

Nearly fifty thousand of this variety of the parasites had been liberated in badly infested woods in different localities in and about Boston. Some of these liberated parasites have now been seen depositing their tiny eggs under the skin of the gypsy moth caterpillars. It is believed that of the fifty thousand released probably ten per cent. have escaped accidents and death and are now at work upon the caterpillars they were secured to destroy.

The entomologists are jubilant. They feel that now there is some certainty that these insects will be able to live and thrive in this country, and that, having once gained a foothold, their increase will be such, with the tremendous caterpillar supply at hand, as to astonish the scientists of the world. The lavish quantity of caterpillars in this State will permit of the same wonderful increase of all the other species of parasites, if once they secure a foothold here and manage to thrive in our climate.

Even with these favorable conditions, Dr. Howard, Professor Kirkland and Dr. E. S. G. Tins, the latter the Washington parasite expert, agree that it will be three years at least before the parasites will be in a position to wage anything like an equal contest with the countless hordes of caterpillars.

In the meantime both Dr. Howard and Superintendent Kirkland say there must be no letup in the present measures for suppressing the moths, and this work will be carried right along, just as if the parasites had never been thought of.

There are several kinds of parasites being propagated at the North Saugus laboratory and for those who have any curiosity as to what they are and what they look like, the accompanying cuts will be of interest.

The pteromalus is a very minute fly, somewhat wasp-like in build, and is not more than one-sixteenth of an inch in length or about like our midge. The female is equipped with an ovipositor or sting; this she thrusts under the skin of the brown-tail caterpillar's back and deposits a number of eggs.

Out of these eggs come most minute maggots, which feed upon the caterpillar and destroy it. The unwilling host lives long enough, however, to give protection and food to the maggot until it goes through its life cycle, and emerges a perfect insect, ready to deposit its eggs into another caterpillar.

This wonderful little enemy of the moth pests is a most prolific breeder, and it is claimed that one pair can multiply in a year to a million. And it is this insect

which has been bred on this soil, and is now supposed to have secured a foothold here.

It was imported here from France. The tachina fly is a two-winged insect, very closely resembling in size and general appearance the common house fly. The tachina lays her eggs upon the back of the caterpillars and gives them there.

The eggs hatch maggots, which burrow into the caterpillar and destroy it. The maggots enter into the pupae state, and from the pupae case, which resembles a large elongated shot, the fly emerges. The tachina fly winters in the pupal state in the ground or under a mass of old leaves, etc. Then the tachina fly, about which so much talk has been made in connection with the moth work in this section, is a wonderful worker against the caterpillars. Tachina is simply the family name, and the genus which is being imported here is called the pimelia, for there are three thousand species known in Europe alone.

They are wasp-like in appearance, have four wings and are internal parasites. They are rather handsome insects, equipped with a long ovipositor with which the females insert their eggs beneath the skin of the caterpillars.

Only one egg is inserted in each caterpillar. The egg hatches a maggot which destroys the host caterpillar. As only one egg is inserted in each caterpillar, the female pimelia can be counted upon to do away with quite a number of caterpillars each season. They winter in the adult stage.

This parasite is considered very valuable because she lays her eggs under the skin of the caterpillar, which has no means of avoiding the inevitable result. In the case of the tachina fly, after her eggs have been laid upon the back of the caterpillars, the latter sometimes moult, or shed their skins, and when the maggots emerge from the eggs they are without food and die.

The braconid flies, of which we have now raised an American-born generation, is one of a large family and its habits and methods of parasitizing the caterpillars is a similar to those of the tachina fly. They breed very rapidly.

In addition to these parasites there have also been imported for work against the moths two varieties of predaceous beetles, which are considered by entomologists to be of great value in this fight. These beetles are now engaged in. They are the calosoma inquisitor and the calosoma sycophanta.

Both these beetles are much alike in form, save that the inquisitor is slightly smaller than the other and is a dull bronze in color, while the calosoma sycophanta is a very handsome, brilliant green beetle.

Both are wonderfully active and are great runners and they are cannibals. 'Cal' is why it is difficult to import them, and the insects have been sent here in all forms of their existence in the effort to ascertain which is the best way to ship them. They climb the trees, seize the caterpillars by the middle in their strong mandibles, and then ensue a great wrestling match. You can count on the calosoma every time, however, as the winner, and when it has eaten its prey it starts out for more.

They possess voracious appetites and before being shipped from abroad to this country are fed sometimes as many as thirty gypsy caterpillars to keep them in good condition until they arrive here. When they arrive at the Saugus laboratory they are hungry and make short work of a number of the caterpillars which are at once given them.

These calosoma beetles pass the pupa stage in the ground and are supposed to winter in the adult form.

It may not be common knowledge, but it is a fact that it is against the law to import any of the insects named in this article into this country, and before they could be imported to this State, a special law was passed at Washington to allow their entry into this country, but only when consigned to Superintendent A. H. Kirkland.

The question has often been asked if these insects will not prove a pest after they have decreased the caterpillar hordes to the extent that food of that character is not abundant for them. The entomologists say there is not the slightest danger of this, and that they will not harm anything but caterpillars.

In the accompanying illustrations, the insects are all enlarged beyond their actual size, but the hair-line beside each insect indicates its exact length in life.

The Tunis Sheep.

Tunis is a country in northern Africa. In 1899 when Gen. William Babson was United States Consul at Tunis, he purchased from the Bay of Tunis, and on his farm ten head of Tunis sheep, which he placed on board the man-of-war, Sophia, bound for the United States. One ram and one ewe only, survived the voyage. The pair was placed under the care of Judge Richard Peters of Belmont, near Philadelphia, who kept and bred them until he had a fine flock of pure blood Tunis sheep.

The imported pair, Carmell and Selma, were both killed by dogs when very old, the ewe missing her last lamb at the age of sixteen years. During the twenty years or more in which Judge Peters bred the Tunis sheep, several fine flocks were sent to North and South Carolina, Virginia and Georgia, where they were successfully bred in large flocks until the beginning of the war in 1861, during which they were nearly all destroyed.

Judge Peters offered the free use of his ram to his friends, his pasture was over-run with ewes, brought from far and near. Some a number of wealthy visitors from Philadelphia, discovering the superiority of the Tunis sheep for mutton over all

other breeds both in quality and price, made up a pure and offered Judge Peters any price he chose to fix on his imported ram, but he refused to sell. These sheep are hardy, bearing heat or cold and fattening with less food and much quicker than any other sheep. An unusual sheep of the Tunis breed was known. The great demand for lambs for mutton was detrimental to the multiplication of the breed. In 1810 the Merino cross struck this country, with fine Merino wool selling at \$3 per pound. Mutton was lost sight of. But now when mutton is king, inquiries are being made for this noble breed of sheep.

Their day is coming, because they have proven themselves adapted to all climates North or South, they have proved a success for this noble breed of sheep.

I sometimes long for the good old times on the farm sixty and seventy years ago, when there was nothing to fight but everything to enjoy. I actually work harder now than the generality of farmers then did. (Genette Hill Farm, Maine. W. P. A.)

Save Surplus Forage.

When the season is a prolific one for grass, instead of allowing immense quantities to go to waste during the summer, farmers would be wise to conserve a portion of the surplus in the form of ensilage for their cattle. Animals which chew the cud differ from all other classes in requiring their food comparatively juicy and bulky. Their digestive apparatus is formed to suit this kind of food. Hence the cow or

soil stock solution to the acre, with borderous.

Bordaux mixture made with very cold water produced no unfavorable effect on potato plants.

Other interesting tests and observations are given in the bulletin, making it one of value to every potato grower. It will be sent free by the station.

Good Second Growth of Grass.

The continued rainy weather has delayed the haying, so that not many farmers in this vicinity are anywhere near through. But there is partial compensation in the fact that the grass has kept growing. Even where it seems to be ripe, there is sometimes a heavy green undergrowth that is quite a redeeming feature. Where grass has been cut, the second growth is phenomenal.

Potatoes continue to look well, and blight has not yet made its appearance. The corn crop is remarkable; a heavy growth of stalks, well loaded with ears.

J. R. DUTTON.
New London County, Ct.

Farmers on Farm Topics.

For cabbage worms we use a little paris green applied in water up to the time heads form. After this we use air-slaked lime, which will kill every worm it touches.—Thomas Convey, Iowa County, Wis.

From an acre of land that had been pastured to sheep, 320 bushels of potatoes to the acre were raised on fertilizer alone.—George Miller, Penobscot County, Me.

There is more money at the present time in cattle, horses and sheep than in hogs, and less labor.—S. H. B., Wayne County, Pa.

With the coming of summer boarders we have a good market at our doors for all the fresh fruit and vegetables that we can raise, and we are free in these lines from competition of the West.—F. B. Guphill, York County, Me.

It is a great mistake to bring men from the city of London, England, to this country to help farmers, as many of them do not know the difference between a cow and a sheep, and before they can be taught to be useful they will bring the farmers' gray heads in sorrow to the grave.—W. E. G., Adolphustown, Ontario.

Oswego and Wayne County Crops.

Oswego and Wayne counties say that the apple crop will be larger than last year but not much over fifty per cent. of a full crop, like that of '04. A good crop of hay is in the barns and oats are being cut with the prospect of a good yield, thirty to sixty bushels per acre. Potatoes are being dug considerably and sold as low as fifty cents—the tops generally look fine yet with an occasional field blasted—weather makes growers fearful of blight and rot.

H. M. P.

Clear up the Fields.

After the haying and harvesting have been completed the fields should be gone over and the headlands of plowed fields and fence corners cleared of any weeds and bushes that may have started into growth. These will thrive wonderfully if left alone, but this should be no part of the farmer's creed nor practice. A little carelessness in this respect will be regretted in the time to come, according to the old saying "One year's seeding makes seven years weeding."

It would be a good idea to get rid of all unnecessary interior fences as fast as possible, as these are coming to be only a nuisance. Once they were considered necessary but that time has passed, and with our farming machinery the less fencing the better.

E. R. TOWNS.

Alfalfa With Timothy.

The articles in this journal of late on alfalfa remind me that on one of the one thousand islands in the St. Lawrence, where E. S. Craspe owns the larger part of the one thousand acres comprising the island, I saw some fine large fields of alfalfa and timothy growing together. Mr. Craspe being away from home I failed to get his experience of the culture that way. But his helpers said he was pleased with this style of growing as it tended to produce finer stalks of the alfalfa.

H. M. PORTER.

Little Udder, N. Y.

Notes from Washington, D. C.

TIMELY TALK ON CANNING.

While the usual practice of canners is to heat the receptacles to a boiling temperature or above, for some time, in order to kill the yeasts, molds, etc., which readily grow on these materials under favorable conditions, resulting in spoiled goods, experiments noted by the Department of Agriculture, show that practically all fruits and nearly all vegetables can be successfully canned by intermittent pasteurization at much lower temperatures. In heating many fruits and vegetables to the boiling temperature they lose their shape and become mushy in appearance, especially when shipped long distances, and there is more or less loss in flavor and quality. In the intermittent pasteurization method the clean fruit and vegetables are placed in clean cans, and water that has been boiled to sterilize it, is added to fill the interstices. The caps are then placed on the cans and sealed, leaving the vent open. The cans are then placed in a wooden steam chest and kept there until the temperature registers 180° in the center of the mass. This temperature is then maintained for fifteen minutes, after which the cans are allowed to stand for twenty-four to forty-eight hours, when they are again heated as before. This operation is repeated for the

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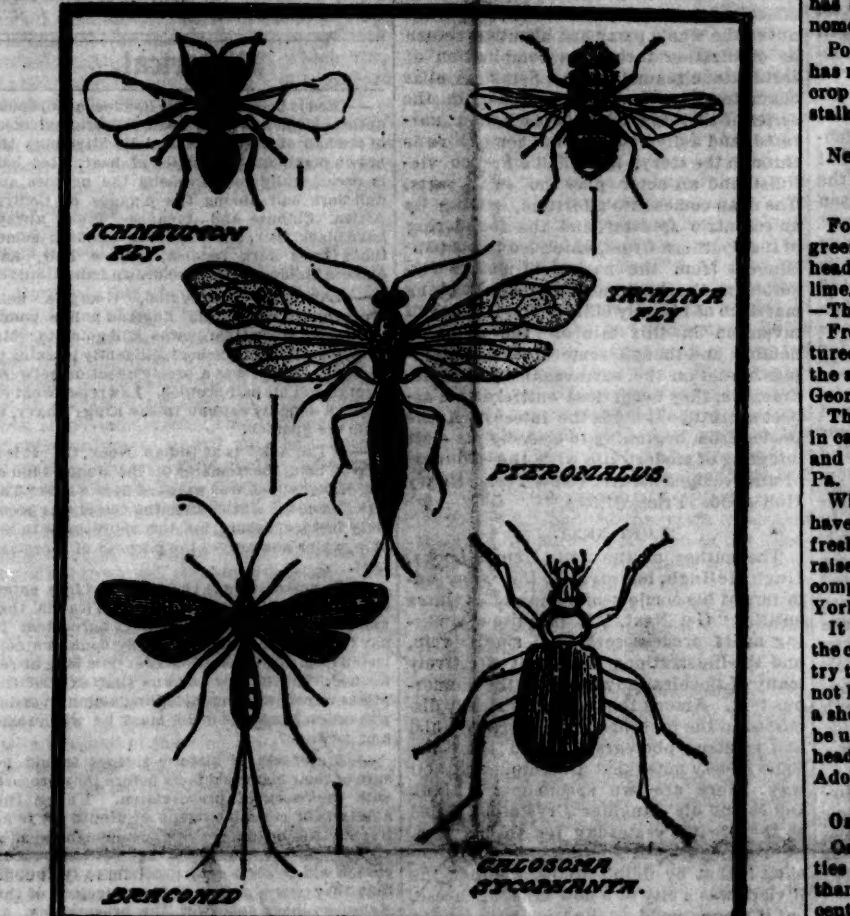
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ENEMIES OF THE GYPSY AND BROWNTAIL MOTHS.

on the piney mountains, on the desert, and in the swamp lands of the Southern States. They have cleaner noses and less tagging than any other sheep; they are busier and will make their own living if it can be found. They are quick, active and strong, have clean faces, and a bright, intelligent look. The three sheep illustrations are of the flock of Charles Roundtree, Crawfordville, Ind., from photograph taken for the American Sheep Breeder.

They will raise two crops of lambs a year, or will bring lambs any month in the year desired. The tails of the Tunis sheep will weigh three to six pounds on mature sheep. They are entirely a different sheep from the Turkish or Persian flat tail, whose tails reach the enormous weight of one hundred pounds, and cannot be propagated in America.

Tunis ewes make the best of mothers, will raise from one to three lambs at a time. They will shear six to twelve pounds of wool. They will make one hundred pounds of finest mutton with less feed than any other sheep in America. September and October Tunis lambs weighing one hundred pounds for Easter market means money to the owner. Quality of mutton superior for fine flavor and early maturity.

Hard Work Making Crops.

This has been a remarkable season so far, and what the future will bring forth no one can tell. It has been the most difficult season for planting, hoeing and haying I ever experienced.

One week of good weather in May, one in June, and but little more than that in July, is a record hard to beat. For more than sixty years I can remember nothing like it, but, perhaps my esteemed friend, Daniel Thing, can recall something similar or worse. The land has been completely soaked the most of the time, and the heavy storms and showers have washed the roads, beaten down corn and grain, flooded the meadows and lowlands and raised havoc with the gardens. It is a wonder to me how crops have stood the onslaught as well as they have.

The hay crop will be nearly as heavy as that of last year, but on account of the wet much damaged hay will be harvested. The oat crop and the potato crop are both looking fine and what little corn is planted is also looking well, but barley is not looking well for it loves warm, sunny, dry weather. The apple crop, on the whole, will be light, more especially in white sorts, such as Baldwin, Greening and Bessie. Haying is now well along, but it will be the middle of August or later before all is finished. There is some complaint of blight on potatoes, but I sincerely hope it will not be extensive. If not, clear weather prevails it will help in preventing the blight. The potato beetle and larvae have been much more plenty than usual. Nothing but Paris green has proved effective in this neighborhood. With hoeing and haying combined, the killing of bugs and spraying for blight, with scanty of help, life on the farm is not so pleasant, as it otherwise would be.

Aroostook County Letter.

Hay is about all harvested and in prime condition. Heavy showers made the oats lodge badly. All crops are growing fast. Potatoes are exceptionally well advanced, and bugs not very rapacious. But other insects are more numerous than ever before, flies being particularly active, bothering the life out of stock. The usual work after haying of plowing soil, blasting and hauling rocks, repairing buildings and other such work is now being attended to.

A large number of summer visitors are here, or have been here, this summer from Massachusetts cities. It is especially young people from the workshops and factories who delight in coming here to spend their vacations.

Our excellent roads are a source of pleasure to owners of automobiles, and they are making free and full use of them to the great worry of our people, who dare not trust their women folks to drive about alone.

V. T. L.

New Sweden, Aroostook County, Me.

Good Voice in Potato Spraying.

Again the subject of potato spraying is brought to the front by a bulletin from the Experiment Station (Geneva) No. 370. This records the results of seventy distinct experiments and shows, perhaps more forcibly than ever before, the value of a good sort of Bordeaux mixture on potato foliage.

In the fourth year of the two-year test at Geneva three applications of Bordeaux increased the yield at the rate of 107 bushels per acre, and five applications 119 bushels. At Riverhead the corresponding gains were 21.5 bushels and 27 bushels respectively.

In thirteen experiments conducted by farmers under station supervision spraying increased the yield on 105.3 acres, 770 bushels at a cost of \$700; and in fifty other farmers' experiments, not under station supervision, the average gain on 697 acres was 251 bushels per acre.

In other tests at the station, the regular Bordeaux mixture was found superior to the milk-potash, and was also proven the best medium for carrying insecticides, either past or present of scale. No injury resulted from the use of two pounds of Paris green or one quart of arsenic of

Poultry.

A Living from Poultry.

The following letter was received by the writer. In answering, he has endeavored, in as few words as possible, to show about what can be done the first year, so that the beginner can plan accordingly. The figures are largely from his own note book, and can be relied upon:

"My wife and I are anxious to live in the country. Could we, do you think, make a comfortable living from poultry? I have \$1200 which I have saved, also furniture enough for a bedroom and parlor. I am thirty-two, and until I was eighteen I lived on my father's farm, so I know something about farming and poultry."

There is a good living to be made from poultry. The secrets of success are—stick to it, go slow, and don't get discouraged. The spring is the best time to start. Choose a location which suits your fancy, preferably one near a city, large town, or summer resort. Avoid a heavy clay soil or any place where the ground remains damp long after a rain, for dampness is fatal to success.

A good hotel trade will, in the long run, prove the most satisfactory. The next best plan will be to supply a first-class retail poultry and egg dealer. Private customers pay the best, but are the most troublesome to handle, for, as a rule, they are quick to complain and slow to pay.

Hire rather than purchase, for you will need all your money for working capital the

first year. A comfortable home with modern improvements and fifteen or twenty acres of good land, can be had within thirty miles of almost any large city for \$50 per month. It may take time to find such a place, but it will, in the end, be money in your pocket to start on an attractive, accessible place, where you needn't feel ashamed to invite your friends and customers. Having found your home, which we may assume to contain twenty acres, pay six months rent in advance. A landlord will, as a rule, allow a small per cent. off for cash in advance.

The following purchases are necessities, and should be made before starting:

Horse, bought at sales stable in city, \$20.00
Light wagon, second hand, for delivering milk, vegetables, etc., 20.00
Farm wagon, second hand, 20.00
Light harness, new, 15.00
Farm harness, second hand, 15.00
Stable blanket (\$2) and lap robe (\$4), 6.00
Hay rake, second hand, 12.00
Cultivator, bought at sale, 4.00
Garden plow, 4.00
One-horse field mower, 4-foot cut, 40.00
Sm. all tools, hoe, rake, barn pails, currycomb, feed bucket, etc., 10.00
A good cow, about 2½ years old, 40.00
Horse feed for six months, 40.00
Cow feed for one month (after that the milk sold will pay for feed), 7.50
One ton oat straw for bedding, 2.00
Plants and seeds for farm and garden, 20.00
Kitchen and laundry fittings, 20.00
Dining room fittings, china, glass and plated silver, 100.00
Total, \$684.70

Buy a shell and grit feed hopper, and with this as a model, make two of wood, with five feed places in each. Divide the henhouse in half, also the yard, and put a feed hopper in each pen; nail it up so that the fowls can just reach it to eat. Fill these with bran, meal, corn meal, ground oats, and linseed meal. Be sure to keep these hoppers filled; also keep grit and oyster shells before them. In the morning feed about four handfuls to each pen, scattered in the straw, and at night about an hour before roosting time, feed about seven handfuls of scratch food. Don't forget plenty of water at all times.

Notice that only six months horse feed has been bought, because after harvest, in September, you will have oats and corn of your own; \$780 has been spent, which includes six months rent, less \$5 for discount. The farm and house are fully equipped, with the exception of the poultry. Select the breed you like, but not until you have thoroughly posted yourself on the merits and failings of the different breeds. If there is a henhouse on the property, repair and clean it with lime and carbolic acid; build a yard one hundred feet long; put plenty of dry earth on the floor of the house and cover it thickly with straw. The poultry account will be something like the following:

Repairs on old henhouse, \$10.00
20 earthen hens, at \$1.00, 20.00
2 cockerels, at \$1.50, 3.00
100 feet 5-foot wire, 2.00
20 staples, at 10¢, 2.00
One year's feed for 20 hens at \$1 per bushel, 20.00
One 100-egg incubator, 12.00
Two outdoor brooders, at \$10, 20.00
50 chick feed, 1.50
Total, \$104.50

A hen will lay about 110 eggs a year, so the twenty will lay 2200. Of this number, save three hundred for sitting. Be careful to follow the incubator directions to the letter, and don't think you know how to run the machine better than the people who made it; seventy-five per cent. is a good batch, or 225 chicks; of this number at least 180 should be raised.

Feed the little ones dry feed until they are six weeks old. Keep plenty of charcoal, grit and water before them in little feed hoppers. Put sand on the floor of the brooders, and cover this with chaff, and on stormy days scatter the grain in the chaff. By the time the chicks are eight weeks old they will be ready to leave the brooders. Separate the cockerels from the pullets as soon as you can tell them apart. As a rule, there will be nearly as many cockerels as pullets. Buy four colony coops; the cost will be \$7 each. Place these out on the grassland and put twenty-five pullets in each. Study the very best methods of feed-

ing, especially the dry feed system, and then be absolutely regular in your hours for feeding; don't forget plenty of water. By the first of September buy six portable 600 foot houses, which cost about \$30 each, or they can be made from large boxes. Set them up on a line twenty feet apart, with yards 10000 feet; put a plain plank floor in each, and cover with six inches of dry earth and plenty of chaff. Move the old hens into two of the new houses, and fifty pullets in the original henhouse. The pullets should be settled in winter quarters by Oct. 1, and by the fifteenth you should get about 220 eggs per week, the price of which at that season will be 2½ cents each. The account for the young stock will be nearly as follows:

4 colony coops, at \$7, 28.00
6 portable houses, at \$20, 120.00
6 rolls, 140 feet, each 5 ft. wire, at \$2.50, 21.00
20 staples, at 10¢, 2.00
200 ft. plank floor, at \$2.50 per 1000, 5.00
10 lbs. nails, at 4¢, .40
1 year's feed for 100 pullets, at \$1 per bushel, 10.00
60 plank posts, at 10¢, 6.00
Total, \$192.40

Plant at least an acre of garden; study some good book on gardening. Fresh vegetables sell readily, and from an acre you should make an average of \$50 per month during the season. Plant six acres of field corn, half an acre of potatoes, half an acre of Giant sugar beets for hens and cow; four acres of oats, one acre of oats and peas; cut when the oats are in the milk for the cow, and cure like hay. Keep four acres in meadow, and one for pasture. Hire the plowing, harrowing and some of the planting done. A team and man cost \$4.50 per day. During harvesting you will have to hire an extra man. Keep an acre for beans and flowers. The annual summing up will only include those items we have already mentioned. There are numerous other little accounts, such as shoeing, coal, wood, living expenses, repairs, etc. Your income will be sufficient to meet these, with economy, for much of your living will come off the farm.

Cash spent.
Six months rent in advance, less discount, \$230.00
Farm tools, horse, cow, etc., 64.70
Poultry plant and stock, 192.40
Team and man for 75 days, at \$4.50, 337.50
Total, \$1224.60

Cash received for Eggs and Poultry.
Pullets laid 400 dozen at \$10, \$4000.00
Eggs, 1400 dozen, at 2¢, 28.00
Poultry sales, 50.00
4 months garden truck, at \$20 per month, 80.00
40 bushels potatoes, at 70¢, 28.00
120 bushels corn, at 70¢, 84.00
2100 quarts milk, at 6¢, 126.00
One calf, 2.00
Total, \$4578.00

On hand, 120 hens, at \$10, \$1200.00
Total, \$5778.00

After the crops are harvested your feeding expenses will be much less. The hen can be made to lay better; there are a great number of poultry keepers who get about 100 eggs from a hen per year. The second year your expense account will be less, and your income greater. Keep your place looking attractive, and don't forget to have plenty of flowers and shrubs. Last of all, remember that there is plenty of room at the top.

The proper designation of the above article would be, "A Living from a Farm." As the statement shows, the poultry supplied considerably less than half of the receipts for the year. The statement of expenses and receipts indicates, I would say, without going into a close analysis of the facts and figures, that the operation brought the farmer out just about even at the end of the first year, the \$600 between receipts and expenses being substantially all in equipment. That is doing well for a first year, and though there are items in the expense account which might be reduced, the showing for the year must be considered good, much better than most of us find in the beginning. It is especially interesting to me because, in a general way, Mr. Parkinson combined poultry with other farming, as I have long been advising beginners to do. Beginning on a rented farm has always been regarded as a mistake, and if, as I assume from the article, Mr. Parkinson began that way, I think it probable that before long he will wish he had bought instead. When the change has to be made from a rented farm to a farm of one's own, or to another rented farm, it is much like beginning over again. No matter how carefully one may plan, the expense and loss are considerable. It would be interesting to learn of Mr. Parkinson's further experience.—Farm Poultry.

Horticultural.

The Prize Fruit Farm.

The Ellwanger prize for the finest and best maintained private place, with reference to the collection and placing of ornamental trees, shrubs and hardy flowers, and the general treatment and maintenance of the ground has been awarded to J. H. Teats & Sons. Competition was limited to members of the Western New York Horticultural Society. Following is the report of the committee making the award:

The Lake Avenue Fruit Farms at Williamson, J. H. Teats & Sons, proprietors, your committee visited on July 23, 1906, and found in a section of country largely devoted to fruit trees, but so far as could be judged in the short time at our disposal, no other fruit farm in the immediate vicinity gave such evidence of progressiveness and intelligent culture.

The orchard interests consist of 7000 peach trees, five to sixteen years, planted, a full bearing; 2500 peach trees not in bearing; twenty-five acres apple orchard in bearing; twenty-seven acres apple orchard not in bearing; one hundred pear cherry trees, 1800 Bartlett pear and 300 plums.

This spring since the report was prepared a tract of eighty-five acres has been added to the farm, and eighty acres set to peaches, making now 250 acres in peaches. In the orchard orchard is especially noticeable their method of renewing the older trees by leaving some sprouts on the main limbs near the trunk, and cutting back to that point when they reach proper development. Elberta and Early Crawford are the leading varieties, though many other sorts are included to a greater or less degree.

Baldwin and Greengage are the main varieties of apples. The healthy appearance and thriftiness of all the orchards of this farm, with the perfect appearance of the growing fruit, make a splendid testimonial to the thorough cultural and spraying methods. The cherry orchard, composed of Montmorency principally, with a few English Morello and early Richmond, was an exception to the rule of vigor and productivity that we noticed in all these orchards.

Hubbard squash are frequently raised as a crop in the young orchards, but do not always prove profitable. Clean culture in the older orchards is practiced during the fore part of the season, and is followed by manure clover as a cover crop. During the late summer and autumn this is clipped as often as it attains a reasonable height.

Soil conditions: Sand or sandy loam is the character of the soil, and does not seem suited to the mulch system which they have tried for a few years on one orchard with very indifferent success.

The packing house is excellently arranged for dispatch of work, and is furnished with modern devices that aid greatly in preparing the packages, in filling them and packing for shipment.

Three to four dollars' worth of clover seed is used annually, and partially, at least, explains the excellent conditions found.

Certainly this is one of the praiseworthy fruit farms of our Empire State.

The second place visited, owned by Judson N. Knapp, we found very pleasantly located in the outskirts of Syracuse, and at an elevation of eight to nine hundred feet above lake level. The surface is sufficiently rolling to afford excellent natural drainage; the top soil is shallow and of a limestone foundation. Great quantities of stone and rocks have been removed, that the land might be easily cultivated.

The fifteen acres of apple orchard, some six hundred trees set sixteen years ago, two rods apart, comprise the major part of the fruit interests. Six varieties are planted, Northern Spy leading the number. The trees are now in healthy, vigorous condition as to growth and foliage, of good size, and give promise of liberal fruitage. Up to this time no spraying has been done. Fifteen hundred bushels of first quality fruit were gathered last year, and the Northern Spy carry a small crop this year.

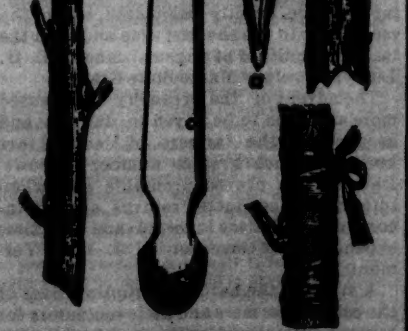
An especially notable fact is that the whole place is seeded to alfalfa, which is cut several times each year for hay and fed out, returning the manure to the orchard. No cultivation is practiced. Orchard and native grasses are growing out the alfalfa which was seeded some ten years ago. The seriousness of the dodder pest to all who grow alfalfa was strikingly illustrated by two small patches that had secured a foothold.

The success of bridge-grafting to combat damage by mice was nicely illustrated. Open centres and spreading tops have been the method of pruning. Mr. Knapp thinks in heavy fruiting some support to the side limbs may be necessary, and has shown the possibility of bridge-grafting from the trunk across the angle to the limb, thus supporting it at some distance from the main trunk. Altogether Mr. Knapp, who is a retired Syracuse manufacturer, has a promising future, and long may he and his family, the fifth generation to hold this property, live to enjoy it.

It is the unanimous opinion of your committee that the Ellwanger prize of \$40 is deserved by and should be awarded to J. H. Teats & Sons of Williamson, N. Y.

Your committee wishes to thank both Messrs. Teats and Knapp, and their families, for their exceeding kindness and generous hospitality while we were with them.

Budding.
Budding consists in taking a bud from one tree and inserting it under the bark of



ART OF BUDDING.

another tree. It is used to take the place of grafting, and is practiced in a commercial way in propagating peaches, plums, cherries, roses and certain varieties of ornamental trees and shrubs. It is essential that the bud and stock unite freely. To have this occur the cells of the cambium layer of the stock must be in state of active division, indicated by the ready separation of the bark from the wood. The union of the two, the bud and the stock, takes place at the edges of the bark of the inserted bud; for this reason the bud should be inserted so as to be cut in from the twig so as to avoid drying out. In climates having severe winter budding is most satisfactory when performed during the end of the growing season. The buds should be plump and mature when taken from shoots of the current year's growth. The "bud stocks" should be cut on the day the buds are to be inserted, trimmed and wrapped at once in a damp cloth to prevent drying out. Trimming consists in cutting off the leaves, saving a bit of the stem to use as a handle in inserting. In setting the buds, use sharp knife; insert blade of knife one-fourth inch below bud, cut upward just behind bud, removing a little of wood, coming out about one-fourth of an inch above bud. (See fig. a.) To insert bud, make T-shaped incision in stock about two inches above ground. (See fig. b.) With the spatula of budding knife loosen the lips of bark in angle of the T cut and slip in the bud. (See fig. b.) The bud must be held firmly in place by a bandage wound above and below, being careful to leave the eye of the bud uncovered. Raffia fibre (wet), bast, candle wick or waxed cloth may be used for tying. Raffia is usually employed. If the bud "takes," remove the bandage in about ten days by cutting loose on back side of stock to prevent the hindering of growth of bud. In three or four weeks cut off the stock just above bud to stimulate the growth of new bud.

Peaches are budded the same year that the pits are planted. As soon as the seedlings are large enough to hold a bud they are ready for budding.

After budding, examine the stock frequently and remove any suckers that may start at base of seedling.

Handling the Pear Crop.
As has been often pointed out, the gathering of the pears should be done before they ripen on the tree. It is an easy matter to determine when the fruit is ready to pick; as by taking hold and gently raising the fruit; if ready it will easily part from the branch, although the fruit may be hard and solid, as it should be when gathered.

If intended for market, the fruit should be forwarded as soon as possible after gathering, especially the earlier varieties, as they get into the consumer's hands in much better condition than if kept a considerable time before shipping; but if intended for home use, they should be placed in cases in a dark, dry, cold cellar, to allow them to mature slowly. Late varieties, as winter pear, may be put into barrels, but I prefer bushel cases for earlier sorts; and shortly before being required for use, they should be placed in a situation where the thermometer registers 65° to 70°, where in a few days the fruit will become mellow, juicy and rich, especially if a piece of wooden cloth is first spread over the bottom, and also between each layer of fruit.—S. T. Maynard, Worcester County, Mass.

The Making of a Fruit Grower.
The peach crop is uncertain and fleeting. Of late I have been looking toward the apple. The apple is the one thing you can sell on the tree, and the surety of the return has led me to plant this fruit. Apples must be grown in a large way, so you can corner a little. One can buy spraying apparatus, material for the package, etc., at wholesale, and in many other ways effect a saving. My first purchase for apple growing was in Syracuse, Ct. It was mostly wood land. Trees were cut and the land plowed where possible; elsewhere holes were dug for the trees. Rocks were blown out with dynamite, and my bank account was almost blown out at the same time. The cost was about \$250 per acre.—J. H. Hale, Hartford County, Ct.

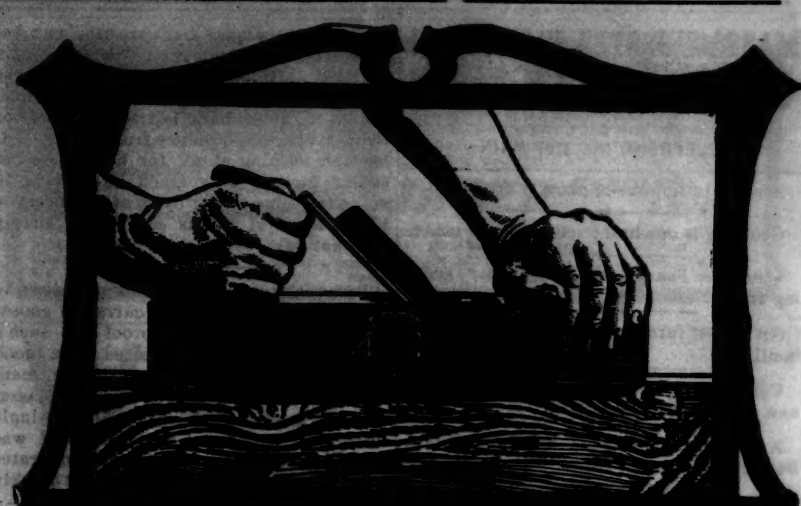
Fashion Notes.
For the warmest days the thins and thin silks give way to the flimsy batistes and sheerest of muslin, which thus far show no disposition toward simplicity, but, on the contrary, are more ornate, if possible, than ever. Batistes and sheer muslins of all sorts are more closely gathered, more stuffy than ever, and several variations of the all-ruffle gown are seen.

Exquisite frocks of a different sort are fashioned out of handkerchief linen, which may be had so fine as to resemble batiste, and is more satisfactory except for the most elaborate occasions, as it has no creases, and therefore does not become so easily crushed. Masses of tucks overlaid with English ecru embroidery or fine beading, often in most intricate designs, are used to their making. A little hand embroidery and lace and Hamburg insertings have lost none of their popularity.

For cool days—and even midsummer is not exempt from a cold wave—there are a number of silk and silk and wool woven now this season, such as "velvettes," a closely woven velvet, having a tiny check marked off with a very fine silk thread; "chiffonettes," which come in all of the delicate shades, as well as black and white, and is very like chiffon, with more lace and quiet, making up into the most delightful of demure gowns, and several light weight wool fabrics, which are offset even in skirts with thin silk or net veils at the forenoon bridge parties held at every hotel or wherever there may be a crowd of summer guests.

Not hats are very generally worn in place of the legions of hats. For these the dotted net are prominent and are made up over a thin silk foundation, the edges either beaded or on a silk loop, and trimmed with flowers and ribbons. The construction, by the way, of hat and ribbon is one of the newest, and, undoubtedly, has something to do with the renewed vogue of net.

A rather chic sunshade was made of plain white cloth of the most delicate ornamental and overlaid with a conventional pattern of



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brand cover a complete line of tools. In buying any kind of tool just see that the name Keen Kutter is on it, and you have assurance of full satisfaction. Keen Kutter Tools have been Standard of America for 36 years and are the best that brains, money and skill can produce.

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"The Recognition of Quality Remains Long After the Price is Forgotten."

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SIMMONS HARDWARE COMPANY, 308 Broadway, N. Y.

St. Louis, U. S. A. Send for Tool Booklet.

black motifs cut from a Chantilly lace scarf which had already been good service in its original capacity. The ribs of the sunshade were outlined with strips of beige velvet ribbon.

Embroideries and braiding are widely in vogue, and the designs grow more and more elaborate, this former often combining silk and cotton with net or lace for the centres of the motifs, and the latter several shadings of one color, not infrequently outlined with a gold or silver cord.

Large flourishing figures and small conventional ones are alike used both in embroidery patterns and braiding designs. Some of the lace braids lend themselves to exquisite effects, especially when the design is applied over a mass of fine tucks. This is especially pretty for net waists, the net tucked and a Duchesse braid used in decoration.

Braiding is a prominent feature of some of the newest yachting suits, which are of white, serge or linen, with a border design around the bottom of the ankle-length skirt and the deep pointed collar, done in an eighth-inch flat braid of plain weave. The sleeves are invariably elbow length, with roll-up cuffs. Instead of the shield there is a detachable pointed yoke, a very small affair, which, in the white suit, is fashioned of a color, scarlet or light or dark blue, or else of the same material braided to correspond with the band on the skirt.

The present style of sleeves, the newest design, which means gathered very full top and bottom, and drawn into the band with almost no pinching at all, is especially adaptable to knife, scordion or sun-ray plying.

A French model shows a natty hip length jacket with very straight lines topping a jaunty skirt closely fitted around the hips. In linen, this design is also given a flash of braiding around the bottom of the coat, straight up and down the front and around the turn-over collar.

One of the most noticeable characteristics of this season's outing apparel is the absence of startling combinations, such as the brilliant scarlets and vivid greens which have haunted us in seasons past. Pastel tints and faded colors answer just now, and the keynote "daintiness," is sounded so distinctly that we are sure to experience some disappointment in reconciling ourselves to the dark colors and severe lines which the French modistes promise us for fall and winter.

Anything new in the way of hairdressing is sure to be hailed with enthusiasm, so when a certain New York hairdresser, summering at Newport, and incidentally serving a few of her most exclusive customers, sent one of them forth with an entirely new coil, great was the interest aroused and the "Muriel" twist had been added to the list of styles. It is accomplished in this wise: Comb the hair out smoothly, then separate the top from the lower part; gather the top in a pompadour effect, drawing the hair rather closely at the sides; coil the ends under the pompadour. Now draw the back hair up, making it of three loops, fastening each of them with a fancy pin. The loops should stand up against the pompadour. If preferred, the three loops might be fastened with ordinary bone or shell pins, and a coronet shape comb inserted between the pompadour and the loops.

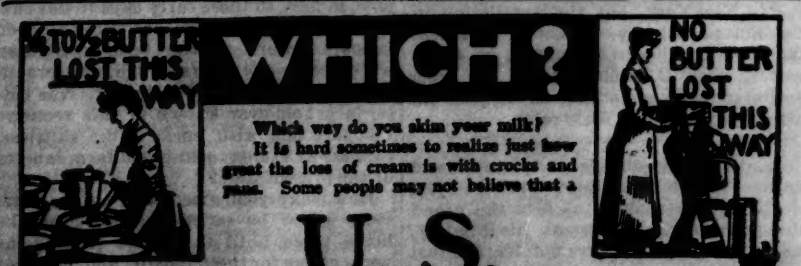
—New York Evening Post.

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Steel and Wooden Wind Mills are world famous. Celebrated Fairbanks steel mills, Jager Helipse wooden mills. Let us figure on your water problem. Water pumping with wind or other power is our specialty. Will attend to the whole job from start to finish and be responsible to you for results.

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U. S. CREAM SEPARATOR

shows enough about the old way to increase their butter yield one-fourth or more. But it does and there's a plain reason for it. When you set milk the cream and skim milk are separated from one another by the force of gravity, but when you skim milk with a U. S. Separator centrifugal force, which is thousands of times stronger than gravity, does the separating. It separates out the last drop of cream. Cream is money—you can't afford to waste it. If you keep three or more cows, it will pay you to buy a U. S. Separator.

Look into this. Write today for a copy of our handsome, new separator catalogue. Ask for number 1. It is fully illustrated and tells all about the U. S. Address VERMONT FARM MACHINE CO., Bellows Falls, Vt.

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Address all letters to Bellows Falls, Vt.

The Workbox.

EVA M. NILES.

Care of the Complexion.

In ordinary cases steaming is advisable but once a week. I do not approve of hot squ

Hot Weather Feed Hints.

The banana is the most satisfying fruit and the quantities now being shipped into this country show that it is rapidly becoming a very important article of diet. In the morning when you feel a little bit seedy and nothing tempts your appetite, try a dish of thinly sliced bananas with lime juice poured over them and you will find that

a long, pointed shawl of black net lined with a deep fringe and embroidered over with little bunches of pink roses and green leaves. The shawl is made

practical summer material with the choice seems to be bluish velvet, from which to cut and trim the skirt, and top in rather severe tailored fashion. A fashionable striped effect appears in the, and are most effective made up with the and reverse of a plain color.

practical costume which could be copied any cotton or linen Stoff is a white velvet

Domestic Hints.

FARINA BALLS.
Boil one pint of milk in a double boiler;
stir in one-half cupful of farina and one

FAHINA BALLO

stirring until the potatoes are golden brown on the bottom and well crusted together. Roll over very slowly and carefully and turn out on heated platter, sprinkling a little chopped

top.

turned, in the sunshine, and let them remain until dry.

For a hot day luncheon or dinner dessert, the ripe red currants, sweeten them well, and stand for some time. Then strain off the juice and put into the refrigerator until cooled. Cut bananas in slices, arrange in a bowl, and throw over them the currant juice. Fresh sponge cake may be served with this dessert.

Fried breads are also much better for breakfast.

A Curb Removed by "Absorbine."

street, Springfield, Mass.

FISH AND

FISH--When not to be taken. PENALTIES

PIKE-PERCH not to be in possession or transported between FEB. 1 and JUNE 1	\$
BLACK BASS not to be taken under eight inches.	\$
TROUT, LAKE TRUT & LAND-LOCKED SALMON between SEPT. 1 and APRIL 1	\$10-
Except in the Counties of Verkhaira, Franklin, Hampden and Hampshire, where close season is between JULY 15 and APRIL 15.	\$10-
AFTER MARCH 31, 1907, close season in ALL COUNTIES between AUG. 1 and APRIL 15.	
TROUT less than six inches in length not to be taken	\$
WILD TROUT not to be bought, sold, or offered for sale, for each fish.	\$
SALMON between AUG. 1 and MAY 1	\$10-
SMELT (only with hook and hand line at any time) between MARCH 15 and JUNE 1	\$
LOBSTERS, alive, not to be less than 10 1-2 inches in length-boiled 10 1-4 inches	\$
LOBSTERS, mutilated	\$
" BEARING EGGS not to be taken at any season	\$10-15
NETS and TRAWLS not to be used in ponds.	\$20-
Not exceeding ten hooks to be used in ponds, under penalty of	\$20-
EXPLOSIVES and POISONS not to be used in fishing vessels.	\$10-

GAME--When not to be Killed. PENALTIES

LEGALIZED FOREIGN-BORN CITIZENS MUST SECURE FROM TOWN OR CITY CLERK A LICENSE FOR HUNTING.	
PARTRIDGE and WOODCOCK, except in Bristol County, between DEC. 1 and OCT. 1.	\$2
In Bristol County, between DEC. 15 and NOV. 1.	\$2
QUAIL, except in Bristol and Nantucket Counties, between DEC. 1 and NOV. 1.	\$2
In Bristol County, between DEC. 15 and NOV. 1.	\$2
In Bristol County, AFTER JAN. 1, 1907, between DEC. 1 and NOV. 1.	\$2
In Nantucket County, taking, killing or possession prohibited until March 1, 1908.	\$2
QUAIL KILLED IN MASSACHUSETTS not to be sold at any time after Jan. 1, 1907.	\$2
QUAIL FROM OTHER STATES not to be sold from Jan. 1 to Nov. 1 after Jan. 1, 1907.	\$2
SEALED DUCK, or TEAL, between MAR. 1 and SEPT. 1.	\$2
ALL OTHER KINDS OF DUCKS, between MAY 30 and SEPT. 1.	\$2
LOVEN, SNIPER, HALL and MARSH or BEACH BIRDS, be- tween MAR. 1 and JULY 15.	\$2
JACKS and RABBITS, except in Bristol County, between MAR. 1 and OCT. 1.	\$10
In Bristol County, between MAR. 1 and NOV. 1.	\$10
RAY SQUIRRELS, except in Bristol County, between MAR. 1 and OCT. 1.	\$10
In Bristol County between DEC. 15 and NOV. 1.	\$10
DEER are not to be killed at any time.	\$100
Not to be chased with dogs.	\$20-50
INSECTIVOROUS and SONG BIRDS are not to be killed, captured or held in possession at any time.	\$10
POUNCE, SHARING, FERRETING OF BIRDS and ANIMALS prohibited, except owner on his own land may trap, BUT NOT SNARE, hares or rabbits between Oct. 1 and Dec. 1.	\$20
FERRETS USED ILLEGALLY to be Confiscated.	\$20
ANGLOIAN, ENGLISH, and GOLDEN PHEASANTS are not to be killed or held in possession, except for propagation.	\$20
PALE PHEASANTS MAY BE KILLED during the open season for shooting quail.	\$20
ILD PIGEONS, UPLAND PLOVER, HERON, BITTERN, GULLS, (except herring gull and black-backed gull) and TERNS, (are not to be killed at any time.	\$10
EARTH MEN (plumated grouse) and WOOD DUCK not to be killed at any time.	\$50-100
LE OF Prairie Chickens Prohibited after Jan. 1, 1907.	\$20
LE OF Greater, Marsh and Bench Birds Prohibited, except during open season, for each bird.	\$10
LE OF DUCKS PROHIBITED, except during open season, after Jan. 1, 1907, each bird.	\$20
LE OF Partridge and Woodcock Prohibited at All Times.	\$20
ING OR CARRYING GANE OUT OF THE STATE	\$20
ETING ON THE LORD'S DAY PROHIBITED.	\$10-20

U. S. LAWS RELATING TO SHIPPING GAME

all packages containing dead animals, birds, or parts thereof, shipped by interstate commerce, must be plainly marked with name and address of shipper and NATURE OF CONTENTS. Penalty on shipper, carrier and consignee, not over \$300. Penalty on common carrier for transporting game killed in violation of laws of State in which killed from which its export is prohibited, \$200.

[illegible]

Undefeated Champion of 1903.

VAN'S HARBOR, MICH.

AME LAWS

Miscellaneous.



Herd

US.

WINKLE'S

46164

1902.

NUMBER CO.

ICH.

WS

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NALITIES.

	\$50
	\$10
\$10-25	\$10-25
	\$10
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\$10-50	\$10-50
	\$1
	\$5
	\$5
\$10-100	\$10-100
\$20-50	\$20-50
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NALITIES	
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This image shows a blank, aged, cream-colored page, likely an endpaper or flyleaf of a book. The paper has a slightly textured appearance with some minor creases and discoloration, characteristic of old paper. The right edge of the page is bound into the spine of the book, which is visible as a dark, textured strip. There is no text or other markings on the page.

